

STORAGE

MACALLY MAC-TB-S120

★★★

£71 inc VAT



RAIDSONIC Icy Box IB-266StUSD-B

★★★★★

£28 inc VAT



If you've upgraded your notebook's 2½in SATA hard disk, you can put your old disk inside an external enclosure. We've looked at two suitable models: Macally's MAC-TB-S120 and RaidSonic's Icy Box IB-266StUSD-B.

The S120's metal enclosure looks attractive and feels sturdy. In addition to USB, the S120 has FireWire 400 and FireWire 800 ports, and Macally provides cables for all three.

We tested the S120 with a 60GB Hitachi hard disk, and its performance over USB was in line with what we'd expect. Over FireWire 400 it managed an average of 31.51MB/s in our large files test and 11.55MB/s in our small files test. Sadly, using FireWire

800 saw no improvement in our small files test and only a small gain in our large file test.

The S120 needs the included power adaptor when connected over USB. This is inconvenient and puzzling since it doesn't need a power adaptor when connected using either FireWire interface.

The Icy Box looks sleek and it's even easier to disassemble than the S120. We fitted the Icy Box with the same 60GB hard disk as the S120 and its performance when connected over USB was also in line with what we'd expect. It was quicker than the S120 in our small files test and scored almost identically in our large file test.

The Icy Box has an eSATA port, the external version of SATA used by internal hard disks (see FAQ). It wasn't much faster than the S120's FireWire connection, with an average score of 32.27MB/s in our large file test and an average score of 10.15MB/s in our small files test. Notebook hard disks aren't that quick, but this month's *PC Builder* on page 174 shows the performance you can get from eSATA when using desktop hard disks.

The Icy Box has a docking station that fits inside a spare 3½in drive bay on your PC and plugs into a spare SATA port. Power is supplied by a Molex connector. You can still remove the drive for travelling, though.

The S120 is hard to recommend, as it costs as much as a 120GB portable FireWire and USB hard disk, and can't be USB bus-powered. The Icy Box is better value and the internal docking station is a great idea.

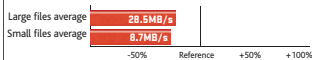
Alan Lu

MACALLY SUMMARY

- ✓ Sturdy, attractive case
- ✗ Can't be USB bus-powered
- ✗ Expensive

SATA HARD DISK ENCLOSURE Takes one 2½in SATA hard disk, USB Hi-Speed, FireWire 400, FireWire 800
PART CODE MAC-TB-S120
SUPPLIER www.macheaven.co.uk
DETAILS www.macally-europe.com

PERFORMANCE (see page 58)

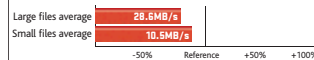


RAIDSONIC SUMMARY

- ✓ Docking station reduces clutter
- ✓ Attractive; easy to disassemble
- ✓ Excellent value

SATA HARD DISK ENCLOSURE Takes one 2½in SATA hard disk, USB Hi-Speed, eSATA
PART CODE IB-266StUSD-B
SUPPLIER www.custompcwarehouse.co.uk
DETAILS www.raidsonic.de

PERFORMANCE (see page 58)



FAQ

Q I want to plug more than one eSATA hard disk into my PC, but it has only one eSATA port. What can I do?

A It has taken a while, but eSATA ports are becoming more popular on PCs and motherboards. However, most have only a single eSATA port. The easiest and cheapest way to add extra ports is to buy a £12 PCI backplate that allows you to connect an eSATA disk to one of the internal SATA ports on your motherboard. If you don't want to occupy a SATA port, a two-port LaCie eSATA PCI-E card costs around £30.

PC Builder on page 174 tells you how to install eSATA ports on your PC, and how to upgrade your existing external storage to use eSATA rather than USB or FireWire.

Alan Lu

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Also consider...

CRUCIAL 1GB Gizmo! Overdrive

★★★★★

£13 inc VAT



USB flash drives tend to be much slower than hard disks, but Crucial's 1GB Gizmo!

Overdrive can write files at 13MB/s and read them at 25MB/s. It wasn't as quick at reading small files, but at 10.65MB/s it is still faster than most. It seemed particularly slow only when writing small files, where it managed a speed of just 0.37MB/s.

The Overdrive is faster than most other flash drives, but it costs less than £15 including shipping, making it great value.

USB FLASH DRIVE 1GB capacity (973MB formatted), USB Hi-Speed
PART CODE CT1GBUFDWHT00
SUPPLIER Crucial 0800 013 0330
DETAILS www.crucial.com/uk
✓ Good performance; cheap
FULL REVIEW Feb 07



MAXTOR Shared Storage II 1TB

★★★★★

£400 inc VAT

PRICE CUT!



Maxtor's Shared Storage II has an enormous

capacity of 1TB, and it costs only 46p per gigabyte. As it contains two hard disks, you can choose to configure it as a RAID 0 or as a RAID 1 array.

The Shared Storage may not be the fastest network storage device we've seen, but its low price, RAID support and UPnP media server make it a great buy.

NETWORK-STORAGE DEVICE 1TB hard disk, 928GB formatted capacity, 10/100/1,000Mbit/s network connection, 2x USB ports, UPnP media, iTunes, print, USB disk servers
PART CODE N14R010
SUPPLIER www.play.com
DETAILS www.maxtorsolutions.com
✓ Low cost per gigabyte; easy to configure; RAID 1 support
FULL REVIEW May 2007



ADAPTEC SnapServer 210 500GB

★★★★★

£737 inc VAT



Adaptec's SnapServer 210 500GB Network Attached Storage (NAS) device contains two 250GB hard disks configured as a RAID 0 array. It was astonishingly fast over a Gigabit Ethernet network in our large files test, where it was similar in speed to a FireWire 800 external hard disk. It wasn't as impressive in our small files test, but it's still one of the quicker NAS devices we've seen.

Alternatively, the 210 can be configured as a RAID 1 array. This halves the amount of available space, but if a disk fails your data is preserved on the other disk. Its small files performance was almost identical to the RAID 0 configuration, but it was a bit slower in our large files test at 35MB/s.

The 210 can't share a USB printer or disk over the network and it's very expensive at £1.58 per gigabyte. However, it's worth considering if you need to share large files over your network.

Alan Lu

SUMMARY

- ☒ Incredibly fast
- ☒ RAID
- ☒ Very expensive

NETWORK-ATTACHED STORAGE 2x 250GB hard disks, 10/100/1,000Mbit/s network connection, 4x USB ports, FTP server **PART CODE** 5325301980
SUPPLIER www.pcwb.com
DETAILS www.adaptec.com/en-GB

PERFORMANCE (see page 58)



LITEON EZDub LH-20A1PU-03C

★★★★★

£44 inc VAT



LiteOn's EZDub LH-20A1PU-03C is the first external 20X DVD writer we've seen. Sadly the EZDub's single-layer performance in our tests was closer to 9X. It couldn't match its claims of 8X two-layer DVD-writing speeds, as our benchmarks show. Still, for an external drive, it's relatively quick and has similar performance to HP's dvd940e (see 'Also consider...', below).

Pressing the EZDub's File button allows you to copy files to disc by dragging them to a pop-up window. Pressing the Dub button activates a wizard that allows you to copy discs without a second optical drive. Unlike previous EZDub writers, using these features was only a few seconds, instead of a few minutes, slower than using Nero.

The EZDub is excellent value and quite quick, but HP's dvd940e is just a bit quicker.

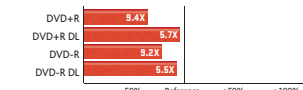
Alan Lu

SUMMARY

- ☒ Includes Nero Recode
- ☒ Inexpensive
- ☒ Bulky

EXTERNAL DVD WRITER 20X DVD-R, 20X DVD+R, 6X DVD-RW, 8X DVD+RW, 8X DVD-R DL, 8X DVD+R DL, 12X DVD-RAM, 48X CD-R, 32X CD-RW
PART CODE LH-20A1PU-03C
SUPPLIER www.lambeta-tek.com
DETAILS www.liteonit.eu

PERFORMANCE (see page 58)



CHOOSING AN... External Hard Disk

Follow the steps to find your ideal specs

SIZE: Desktop

CAPACITY: 160GB

SPINDLE SPEED: 7,200rpm

INTERFACE: USB Hi-Speed

Recommended minimum in grey

1 A basic external hard disk that's good enough for simple backups and designed to sit on your desktop with the specifications as shown above will cost around £60.

2 If you need more capacity, it's best to buy the largest hard disk you can afford. If you're using your external hard disk to back up your internal disk, the general rule is to buy an external disk with twice the capacity of your internal disk so you have enough room for other files.

3 If you need to transport lots of files, you will need a portable hard disk. Drives using a 2½in hard disk (called portable drives) are the best value and are available in capacities up to 160GB. They're small enough to slip into a coat pocket or a bag. However, these drives are more expensive per gigabyte than their desktop equivalents.

If size is really important, you need a pocket drive. An external hard disk that uses a 1.8in hard disk (iPod sized) is a good bet. These drives have a maximum capacity of 80GB.

4 Performance can be a big issue with portable drives. If you are writing a lot of data to and from a disk, choose one with a high spin speed, as you'll get better throughputs. Most pocket-sized hard disks have a spindle speed of 3,600rpm, while most portable hard disks have a spindle speed of 4,200rpm or 5,400rpm. Desktop hard disks tend to have a spindle speed of 7,200rpm although 5,400rpm models are also available.

5 USB Hi-Speed is the most common interface found on external hard disks and is also backwards-compatible with the slower USB 1.1. This is fast enough for most uses, but if you deal with very large files on a regular basis, such as DV movies, then a FireWire 400 hard disk will be quicker. FireWire 800 is even zippier, but few hard disks and even fewer PCs have FireWire 800 ports. ESATA hard disks can be even faster, but these are harder to find than FireWire 800 disks.

SAMSUNG Super Writemaster SH-S182M

★★★★★

£28 inc VAT

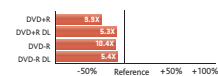


The Super Writemaster from Samsung

proved to be one of the speediest internal burners we've seen when creating single-layer DVDs. It includes Nero's Recode software, which allows you to squeeze a two-layer DVD movie on to a single-layer DVD.

At such a low price, the Writemaster is a bargain.

INTERNAL DVD WRITER 18X DVD-R, 18X DVD+R, 6X DVD-RW, 8X DVD+RW, 8X DVD-R DL, 8X DVD+R DL, 12X DVD-RAM, 48X CD-R, 32X CD-RW
PART CODE SH-S182M/RSMN
SUPPLIER www.amazon.co.uk
DETAILS www.samsungodd.com/eng ☒ Speedy single-layer DVD writing ☒ Slow two-layer DVD performance
FULL REVIEW Apr 2007



HP dvd940e

★★★★★

£47 inc VAT



HP's dvd940e is one of the cheapest external DVD writers we've seen. It can write a LightScribe label in around 18 minutes, which is very fast. Its bulbous black case isn't pretty but feels sturdy, and Nero Express 6 and PowerDVD 6 are included.

The dvd940e performed particularly well writing DVD-R DL discs and is very good value.



EXTERNAL DVD WRITER 18X DVD-R, 18X DVD+R, 6X DVD-RW, 8X DVD+RW, 8X DVD-R DL, 8X DVD+R DL, 12X DVD-RAM, 48X CD-R, 32X CD-RW
PART CODE 3744216092
SUPPLIER www.amazon.co.uk
DETAILS www.hp.co.uk
☒ Cheap; fast DVD-R DL writing ☒ Not very pretty
FULL REVIEW Apr 2007

